

ABSTRACT

A method and devices for bone tissue expansion and compression for receiving a dental implant are disclosed. The method includes the steps of
5 creating an initial osseotomy site in the maxilla or the mandible using a pilot drill; screwing a first threaded expander into the site to expand the site laterally; and allowing the expander staying in the site for a short time to impress the interior wall of the osseotomy site; then retrieving the first expander. These steps are repeated using a second, and/or third threaded expander having an
10 increasing outer diameter to further expand the osseotomy site to a final diameter which is complementary, but narrower than the diameter of the dental implant so that expanded osseotomy site enables uniform engagement of the implant with the bone tissue. A preparation drilling to extend osseotomy site only at cortical level can be incorporated for hard bone and larger implants.

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